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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,986	12/26/2001	Ikuto Ooyama	02410266AA	7794

7590

12/11/2003

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EXAMINER

LEE, JOHN D

ART UNIT

PAPER NUMBER

2874

DATE MAILED: 12/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/025,986	OOYAMA ET AL.	
	Examiner	Art Unit	
	John D. Lee	2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-8,10,11 and 13-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8,10,11 and 13-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Applicant's communication filed on October 27, 2003, has been carefully studied by the Examiner. The arguments advanced therein, considered together with the amendments made to the claims, are persuasive and the rejections set forth in the previous Office action are withdrawn. In view of further search, however, and the consequent discovery of a relevant prior art document, a new rejection is set forth below. The newly added claims have also necessitated a new 35 U.S.C. § 112 rejection which is also set forth below. This action is **not** made final.

The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 19-21 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 19 (lines 3 and 4), claim 20 (line 3), and claim 21 (line 2), there is no antecedent support for the term "the optical fiber chip", thus rendering these claims indefinite. The correct term would be "the holding member". Also, in claim 19, the phrase "the inclined surfaces of...the optical fiber chip" is inaccurate because claim 5 (from which this claim depends) does not specify that the holding member (optical fiber chip) has an inclined surface. This inaccuracy makes claim 19 further indefinite.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

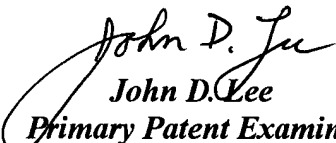
Claims 1, 2, 4-8, 10, 11, and 13-21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,142,678 to Cheng (newly cited). Cheng discloses an optical fiber collimator comprising: a rod lens having an inclined end face; an optical fiber; and an optical fiber chip (tube) arranged at a distance from the lens and also having an inclined end face. Although not shown clearly in the drawings, the Cheng embodiments encompass those instances wherein the fiber is eccentrically located with respect to the axis of the tube (and thus with respect to the axis of the rod lens). See especially column 1 of the reference, wherein it is explained that one of the major problems in the prior art is the eccentricity of the fiber within the tube (ferrule) when aligning the fiber and rod lens. The apparatus and method of Cheng solves this problem through a unique way of adjusting the parts of the collimator. This means that in those instances wherein the fiber is eccentrically located with respect to the axis of its ferrule (tube), accurate alignment with the rod lens can still be achieved. This is because the Cheng technique results in compensation for a quantity of eccentricity of the optical fiber so that the center of the rod lens then substantially coincides with a center of a light beam incident on the rod lens from the optical fiber. The person of ordinary skill in the art would have recognized that the Cheng apparatus is obviously the same as the collimating apparatus being claimed (even though the same terms and descriptions are not employed). Notice that the Cheng apparatus includes a generally cylindrical member which has a lens holding hole on one side and a fiber tube holding hole on the other side. Different embodiments of this cylindrical member are shown, all of which allow for the appropriate compensation and adjustment of fiber eccentricity discussed above. Applicant's claimed collimator variations are all very similar to the Cheng variations and

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would certainly have been obvious in view of the reference. Notice also that the Cheng rod lens is a gradient index rod lens. The equation set forth in newly added claim 16 is the standard equation for a gradient index distribution.

Applicant's arguments with respect to the presently pending claims have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning the merits of this communication should be directed to Examiner John D. Lee at telephone number (703) 308-4886. The Examiner's normal work schedule is Tuesday through Friday, 6:30 AM to 5:00 PM. Any inquiry of a general or clerical nature (i.e. a request for a missing form or paper, etc.) should be directed to the Technology Center 2800 receptionist at telephone number (703) 308-0956, to the technical support staff supervisor (Team 2) at telephone number (703) 308-3072, or to the Technology Center 2800 Customer Service Office at telephone number (703) 306-3329.


John D. Lee
Primary Patent Examiner
Group Art Unit 2874